

ABSTRACT OF THE DISCLOSURE

A method of operating a phosphoric acid fuel cell is
5 provided, in which the phosphoric acid fuel cell effects
power generation at a high output. A power-generating cell
is provided with an electrolyte layer comprising a matrix
composed of basic polymer impregnated with acidic liquid
electrolyte such as phosphoric acid. The phosphoric acid
10 fuel cell has a fuel cell stack comprising a single unit of
the power-generating cell or a predetermined number of the
power-generating cells electrically connected in series to
one another. When the phosphoric acid fuel cell is
operated, the supply pressures of the oxygen-containing gas
15 and the hydrogen-containing gas are set so that the pressure
on a cathode electrode of the power-generating cell is
higher than that of an anode electrode.